



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,356	02/24/2004	Lars Karlsson	ADV7-H64	8961

7590

07/07/2006

Karl M. Steins  
Steins & Associates  
Suite 120  
2333 Camino del Rio South  
San Diego, CA 92108

EXAMINER
----------

MULL, FRED H

ART UNIT	PAPER NUMBER
----------	--------------

3662

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/785,356	<b>Applicant(s)</b> KARLSSON ET AL.	
	<b>Examiner</b> Fred H. Mull	<b>Art Unit</b> 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to various objection(s) have been fully considered and are persuasive. The objections and rejection have been withdrawn.
2. Applicant's arguments on p. 6-7, with respect to the rejection(s) of claims 1-9 over Liu and Dupray have been fully considered but they are not persuasive.

Firstly, applicant argues that the "future position" claim language distinguishes over the prior art (p. 6-7). See the newly added 35 USC 112 rejection below.

Secondly, applicant argues that the "connecting vector" claim language distinguishes over the prior art (p. 7). However, this language does not appear in any of these claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., connecting vector) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3. A new 35 USC 112 rejection(s) has been added. Therefore, this action is non-final.

### ***Drawings***

4. The drawings are objected to as indicated in the Notice of Draftperson's Patent Drawing Review.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. The disclosure is objected to because of the following informalities:

On p. 11, lines 5-7, reference should be made to application number 10/785356.

Reference to newly added Fig. 5 should be added to the Brief Description and the Detailed Description of the Drawings sections.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description and enablement requirements. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, and thus do not enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 1, lines 14-15, it states "said computing device then estimates a future position of said transmitter in reference to said cross-over point". However, this is not disclosed nor enabled in the specification. From p. 12, lines 10-17, it appears that the receiver moves relative to a stationary transmitter, in order to get a more exact position measurement for the transmitter. There is nothing in the specification to suggest the transmitter is moving or the method can predict its future position.

Art Unit: 3662

7. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description and enablement requirements. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, and thus do not enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

According to p. 11 of the specification, lines 8-9, "A cross-over point is the intersection between the last best LOB data entry, and the newly arrived LOB."

However, this appears to contradict Fig. 5, where the cross-over point appears to be determined from the LOB's from two separate receivers.

Also, the term "connecting vector" is not used nor defined in this application. It is referred to in related application 10/785,353. However, from that application, the connecting vector should be perpendicular to the latest LOB, and the connecting vector does not appear to be perpendicular to the central line from 14D' in Fig. 5.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3662

8. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Hobson.

Liu discloses:

a mobile DF set, said set comprising a receiver for receiving incident signal transmissions (30A, Fig. 3);

a line of bearing (LOB) generating system in operative communication with said receiver and configured to generate lines of bearing responsive to said received signal transmissions, determining the position of a transmitter transmitting said transmissions from said lines of bearings, and a display means for displaying said determined position (Fig. 5; p. 3, 1<sup>st</sup> column, lines 20-36; ¶64, lines 6-30).

Liu fails to disclose displaying an indication of LOB error.

Hobson discloses that “systems which give a precise determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination.” (col. 2, lines 3-7). It is especially important to understand the true nature of the position measurement when the locator is emergency services seeking someone during an emergency situation, as is the case in Liu (¶10-21).

Hobson further discloses:

an LOB error generating system in operative communication with said line of bearing generating system and configured to generate error factors related to said lines of bearing (Fig. 2; col. 4, lines 31-42; col. 6, line 61 to col. 7, line 6);

an probability overlay generating system in operative communication with said LOB error generating system and configured to generate an overlay probability map responsive to said error factors (Figs. 4-7; col. 8, lines 16-31); and

display means for visually displaying said lines of bearing ( $\mu_1$ - $\mu_3$ , Figs. 4-7), said error factors and said overlay map ( $P_1$ - $P_{11}$ ).

It would have been obvious to include the probability display feature of Hobson to the emergency position displaying system of Liu in order to give emergency services personnel a more accurate picture of where the person seeking emergency services might be, as motivated by Hobson (that "systems which give a precise determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination." (col. 2, lines 3-7).)

9. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupray in view of Hobson.

Dupray discloses:

a mobile DF set, said set comprising a receiver for receiving incident signal transmissions (148, Fig. 4);

a line of bearing (LOB) generating system in operative communication with said receiver and configured to generate lines of bearing responsive to said received signal transmissions, determining the position of a transmitter transmitting said transmissions



from said lines of bearings, and a display means for displaying said determined position (col. 20, lines 51 to col. 21, line 10).

Dupray fails to disclose displaying an indication of LOB error.

Hobson discloses that “systems which give a precise determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination.” (col. 2, lines 3-7). It is especially important to understand the true nature of the position measurement when the locator is emergency services seeking someone during an emergency situation, as is the case in Liu (¶10-21).

Hobson further discloses:

an LOB error generating system in operative communication with said line of bearing generating system and configured to generate error factors related to said lines of bearing (Fig. 2; col. 4, lines 31-42; col. 6, line 61 to col. 7, line 6);

an probability overlay generating system in operative communication with said LOB error generating system and configured to generate an overlay probability map responsive to said error factors (Figs. 4-7; col. 8, lines 16-31); and

display means for visually displaying said lines of bearing ( $\mu_1$ - $\mu_3$ , Figs. 4-7), said error factors and said overlay map ( $P_1$ - $P_{11}$ ).

It would have been obvious to include the probability display feature of Hobson to the emergency position displaying system of Dupray in order to give emergency services personnel a more accurate picture of where the person seeking emergency services might be, as motivated by Hobson (that “systems which give a precise

determination of latitude and longitude to the operator typically fail to provide the operator with information concerning the probable degree of accuracy of the determination." (col. 2, lines 3-7).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 571-272-6975. The examiner can normally be reached on Monday through Friday from approximately 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fhm

Fred H. Mull  
Examiner  
Art Unit 3662

  
THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600